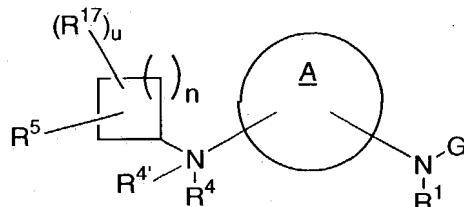


CLAIMS

What is claimed is:

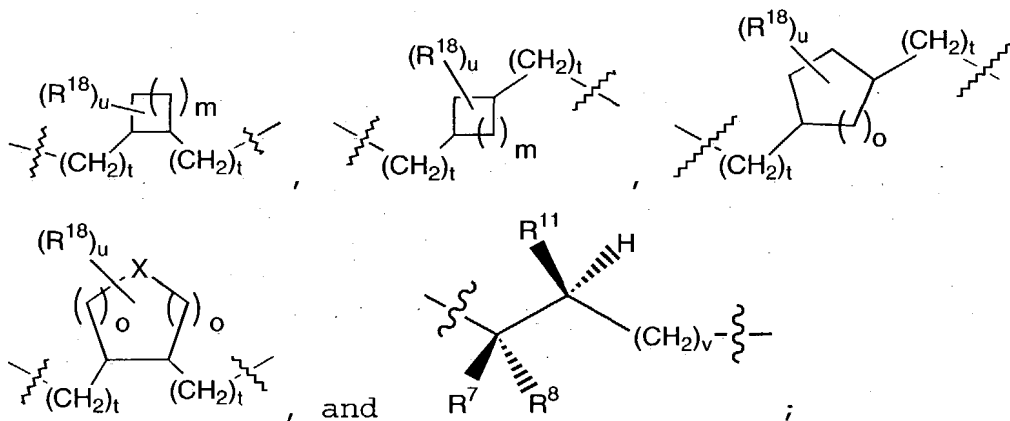
1. A compound of formula (I):



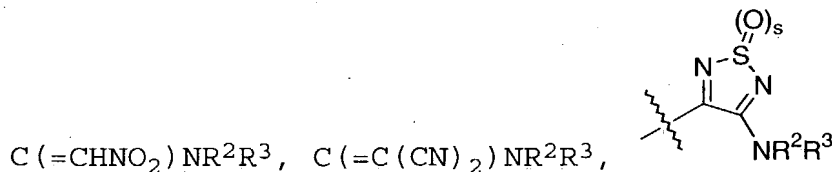
(I)

- or stereoisomers or pharmaceutically acceptable salts thereof, wherein:

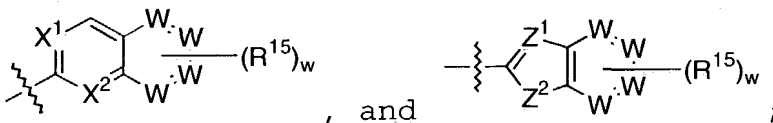
A is selected from



G is selected from $-C(O)R^3$, $-C(O)NR^2R^3$, $-C(O)OR^3$, $-SO_2NR^2R^3$, $-SO_2R^3$, $-C(=S)NR^2R^3$, $C(=NR^{1a})NR^2R^3$, $C(=CHCN)NR^2R^3$,



$C(=CHNO_2)NR^2R^3$, $C(=C(CN)_2)NR^2R^3$,



W, at each occurrence, is independently selected from C or N,
provided at least two of W are C;

X is selected from O, S, and NR^{19} ;

5

X^1 and X^2 are independently selected from C and N;

Z^1 is selected from C and N;

10 Z^2 is selected from NR^{1a} , O, S and C;

R^1 and R^2 are independently selected from H, C_{1-8} alkyl, C_{3-8} alkenyl, C_{3-8} alkynyl, and a $(\text{CH}_2)_r\text{-C}_{3-10}$ carbocyclic residue substituted with 0-5 R^a ;

15

R^{1a} is independently selected from H, C_{1-6} alkyl, $(\text{CH}_2)_r\text{C}_{3-6}$ cycloalkyl, and a $(\text{CH}_2)_r\text{-C}_{3-10}$ carbocyclic residue substituted with 0-5 R^a ;

20 R^a , at each occurrence, is selected from C_{1-4} alkyl, C_{2-8} alkenyl, C_{2-8} alkynyl, $(\text{CH}_2)_r\text{C}_{3-6}$ cycloalkyl, Cl, Br, I, F, $(\text{CF}_2)_r\text{CF}_3$, NO_2 , CN, $(\text{CH}_2)_r\text{NR}^b\text{R}^b$, $(\text{CH}_2)_r\text{OH}$, $(\text{CH}_2)_r\text{OR}^c$, $(\text{CH}_2)_r\text{SH}$, $(\text{CH}_2)_r\text{SR}^c$, $(\text{CH}_2)_r\text{C}(\text{O})\text{R}^b$, $(\text{CH}_2)_r\text{C}(\text{O})\text{NR}^b\text{R}^b$, $(\text{CH}_2)_r\text{NR}^b\text{C}(\text{O})\text{R}^b$, $(\text{CH}_2)_r\text{C}(\text{O})\text{OR}^b$, $(\text{CH}_2)_r\text{OC}(\text{O})\text{R}^c$,
25 $(\text{CH}_2)_r\text{CH}(\text{=NR}^b)\text{NR}^b\text{R}^b$, $(\text{CH}_2)_r\text{NHC}(\text{=NR}^b)\text{NR}^b\text{R}^b$, $(\text{CH}_2)_r\text{S}(\text{O})_p\text{R}^c$, $(\text{CH}_2)_r\text{S}(\text{O})_2\text{NR}^b\text{R}^b$, $(\text{CH}_2)_r\text{NR}^b\text{S}(\text{O})_2\text{R}^c$, and $(\text{CH}_2)_r\text{phenyl}$;

R^b , at each occurrence, is selected from H, C_{1-6} alkyl, C_{3-6} cycloalkyl, and phenyl;

30

R^c , at each occurrence, is selected from C_{1-6} alkyl, C_{3-6} cycloalkyl, and phenyl;

alternatively, R^2 and R^3 join to form a 5, 6, or 7-membered
35 ring substituted with 0-3 R^a ;

- R^3 is selected from a $(CR^{3'}R^{3''})_r-C_{3-10}$ carbocyclic residue substituted with 0-5 R^{15} and a $(CR^{3'}R^{3''})_r-5-10$ membered heterocyclic system containing 1-4 heteroatoms selected from N, O, and S, substituted with 0-3 R^{15} ;
- $R^{3'}$ and $R^{3''}$, at each occurrence, are selected from H, C_{1-6} alkyl, $(CH_2)_rC_{3-6}$ cycloalkyl, and phenyl;
- R^4 is hydrogen, C_{1-8} alkyl, C_{2-8} alkenyl, C_{2-8} alkynyl, $(CH_2)_rC_{3-6}$ cycloalkyl, and a $(CH_2)_r-C_{3-10}$ carbocyclic residue substituted with 0-5 R^a ;
- alternatively, R^4 joins with R^8 or R^{11} to form a pyrrolidine or piperidine ring system substituted with 0-3 R^{4d} ;
- $R^{4'}$ is absent, taken with the nitrogen to which it is attached to form an N-oxide, or selected from C_{1-8} alkyl, C_{2-8} alkenyl, C_{3-8} alkynyl, $(CH_2)_rC_{3-6}$ cycloalkyl, $(CH_2)_qC(O)R^{4b}$, $(CH_2)_qC(O)NR^{4a}R^{4a'}$, $(CH_2)_qC(O)OR^{4a}$, and a $(CH_2)_r-C_{3-10}$ carbocyclic residue substituted with 0-3 R^{4c} ;
- R^{4a} and $R^{4a'}$, at each occurrence, are selected from H, C_{1-6} alkyl, $(CH_2)_rC_{3-6}$ cycloalkyl, and phenyl;
- R^{4b} , at each occurrence, is selected from C_{1-6} alkyl, C_{2-8} alkenyl, $(CH_2)_rC_{3-6}$ cycloalkyl, C_{2-8} alkynyl, and phenyl;
- R^{4c} , at each occurrence, is selected from C_{1-6} alkyl, C_{2-8} alkenyl, C_{2-8} alkynyl, C_{3-6} cycloalkyl, Cl, F, Br, I, CN, NO_2 , $(CF_2)_rCF_3$, $(CH_2)_rOC_{1-5}$ alkyl, $(CH_2)_rOH$, $(CH_2)_rSC_{1-5}$ alkyl, $(CH_2)_rNR^{4a}R^{4a'}$, and $(CH_2)_rphenyl$;

R^{4d} , is selected from H, C_{1-6} alkyl, $(CHR')_qOH$, $(CHR')_qOR^{7a}$,
 $(CHR')_qOC(O)R^{7b}$, $(CHR')_qOC(O)NHR^{7a}$;

R^5 is selected from a $(CR^{5'}R^{5''})_t-C_{3-10}$ carbocyclic residue
substituted with 0-5 R^{1616} and a $(CR^{5'}R^{5''})_t-5-10$
membered heterocyclic system containing 1-4 heteroatoms
selected from N, O, and S, substituted with 0-3 R^{1616} ;

$R^{5'5}$ and $R^{5''5}$, at each occurrence, are selected from H,
 C_{1-616} alkyl, $(CH_2)_rC_{3-636}$ cycloalkyl, and phenyl;

R^7 , is selected from H, C_{1-6} alkyl, C_{2-8} alkenyl, C_{2-8}
alkynyl, $(CHR')_qOH$, $(CHR')_qSH$, $(CHR')_qOR^{7d}$, $(CHR')_qSR^{7d}$,
 $(CHR')_qNR^{7a}R^{7a'}$, $(CHR')_qC(O)OH$, $(CHR')_rC(O)R^{7b}$,
 $(CHR')_qC(O)NR^{7a}R^{7a'}$, $(CHR')_qNR^{7a}C(O)R^{7a}$, $(CHR')_qNR^{7a}C(O)H$,
 $(CHR')_qC(O)OR^{7a}$, $(CHR')_qOC(O)R^{7b}$, $(CHR')_qS(O)_pR^{7b}$,
 $(CHR')_qS(O)_2NR^{7a}R^{7a'}$, $(CHR')_qNR^{7a}S(O)_2R^{7b}$,
 $(CHR')_qNHC(O)NR^{7a}R^{7a'}$, $(CHR')_qNHC(O)OR^{7a}$,
 $(CHR')_qOC(O)NHR^{7a}$, C_{1-6} haloalkyl, a $(CHR')_r-C_{3-10}$
carbocyclic residue substituted with 0-3 R^{7c} , and a
 $(CHR')_r-5-10$ membered heterocyclic system containing 1-4
heteroatoms selected from N, O, and S, substituted with
0-2 R^{7c} ;

R^{7a} and $R^{7a'}$, at each occurrence, are selected from H, C_{1-6}
alkyl, C_{3-8} alkenyl, C_{3-8} alkynyl, a $(CH_2)_r-C_{3-10}$
carbocyclic residue substituted with 0-5 R^{7e} , and a
 $(CH_2)_r-5-10$ membered heterocyclic system containing 1-4
heteroatoms selected from N, O, and S, substituted with
0-3 R^{7e} ;

R^{7b} , at each occurrence, is selected from C_{1-6} alkyl, C_{2-8}
alkenyl, C_{2-8} alkynyl, a $(CH_2)_r-C_{3-6}$ carbocyclic residue
substituted with 0-2 R^{7e} , and a $(CH_2)_r-5-6$ membered

heterocyclic system containing 1-4 heteroatoms selected from N, O, and S, substituted with 0-3 R^{7e};

R^{7c}, at each occurrence, is selected from C₁₋₆ alkyl, C₂₋₈ alkenyl, C₂₋₈ alkynyl, (CH₂)_rC₃₋₆ cycloalkyl, Cl, Br, I, F, (CF₂)_rCF₃, NO₂, CN, (CH₂)_rNR^{7f}R^{7f}, (CH₂)_rOH, (CH₂)_rOC₁₋₄ alkyl, (CH₂)_rSC₁₋₄ alkyl, (CH₂)_rC(O)OH, (CH₂)_rC(O)R^{7b}, (CH₂)_rC(O)NR^{7f}R^{7f}, (CH₂)_rNR^{7f}C(O)R^{7a}, (CH₂)_rC(O)OC₁₋₄ alkyl, (CH₂)_rOC(O)R^{7b}, (CH₂)_rC(=NR^{7f})NR^{7f}R^{7f}, (CH₂)_rS(O)_pR^{7b}, (CH₂)_rNHC(=NR^{7f})NR^{7f}R^{7f}, (CH₂)_rS(O)₂NR^{7f}R^{7f}, (CH₂)_rNR^{7f}S(O)₂R^{7b}, and (CH₂)_rphenyl substituted with 0-3 R^{7e};

R^{7d}, at each occurrence, is selected from methyl, CF₃, C₂₋₆ alkyl substituted with 0-3 R^{7e}, and a C₃₋₁₀ carbocyclic residue substituted with 0-3 R^{7c};

R^{7e}, at each occurrence, is selected from C₁₋₆ alkyl, C₂₋₈ alkenyl, C₂₋₈ alkynyl, C₃₋₆ cycloalkyl, Cl, F, Br, I, (CF₂)_rCF₃, (CH₂)_rOC₁₋₅ alkyl, (CH₂)_qOH, OH, (CH₂)_qSH, SH, (CH₂)_rSC₁₋₅ alkyl, (CH₂)_qNR^{7f}R^{7f}, and (CH₂)_rphenyl;

R^{7f}, at each occurrence, is selected from H, C₁₋₆ alkyl, and C₃₋₆ cycloalkyl;

R⁸ is selected from H, C₁₋₆ alkyl, C₃₋₆ cycloalkyl, and (CH₂)_rphenyl substituted with 0-3 R^{8a};

R^{8a}, at each occurrence, is selected from C₁₋₆ alkyl, C₂₋₈ alkenyl, C₂₋₈ alkynyl, C₃₋₆ cycloalkyl, Cl, F, Br, I, CN, NO₂, (CF₂)_rCF₃, (CH₂)_rOC₁₋₅ alkyl, OH, SH, (CH₂)_rSC₁₋₅ alkyl, (CH₂)_rNR^{7f}R^{7f}, and (CH₂)_rphenyl;

alternatively, R⁷ and R⁸ join to form C₃₋₇ cycloalkyl, or
=NR^{8b};

R^{8b} is selected from H, C₁₋₆ alkyl, C₃₋₆ cycloalkyl, OH, CN,
5 and
(CH₂)_r-phenyl;

R¹¹, is selected from H, C₁₋₆ alkyl, C₂₋₈ alkenyl, C₂₋₈
10 alkynyl, (CH₂)_qOH, (CH₂)_qSH, (CH₂)_qOR^{11d}, (CH₂)_qSR^{11d},
(CH₂)_qNR^{11a}R^{11a'}, (CH₂)_rC(O)OH, (CH₂)_rC(O)R^{11b},
(CH₂)_rC(O)NR^{11a}R^{11a'}, (CH₂)_qNR^{11a}C(O)R^{11b},
(CH₂)_qNR^{11a}C(O)NR^{11a'}R^{11a}, (CH₂)_rC(O)OR^{11a},
(CH₂)_qOC(O)R^{11b}, (CH₂)_qS(O)_pR^{11b}, (CH₂)_qS(O)₂NR^{11a}R^{11a'},
15 (CH₂)_qNR^{11a}S(O)₂R^{11b}, C₁₋₆ haloalkyl, a (CH₂)_r-C₃₋₁₀
carbocyclic residue substituted with 0-5 R^{11c}, and a
(CH₂)_r-5-10 membered heterocyclic system containing 1-4
heteroatoms selected from N, O, and S, substituted with
0-3 R^{11c};

20 R^{11a} and R^{11a'}, at each occurrence, are selected from H, C₁₋₆
alkyl, C₃₋₈ alkenyl, C₃₋₈ alkynyl, a (CH₂)_r-C₃₋₁₀
carbocyclic residue substituted with 0-5 R^{11e}, and a
(CH₂)_r-5-10 membered heterocyclic system containing 1-4
25 heteroatoms selected from N, O, and S, substituted with
0-3 R^{11e};

R^{11b}, at each occurrence, is selected from C₁₋₆ alkyl, C₂₋₈
alkenyl, C₂₋₈ alkynyl, a (CH₂)_r-C₃₋₆ carbocyclic residue
30 substituted with 0-2 R^{11e}, and a (CH₂)_r-5-6 membered
heterocyclic system containing 1-4 heteroatoms selected
from N, O, and S, substituted with 0-3 R^{11e};

R^{11c} , at each occurrence, is selected from C_{1-6} alkyl, C_{2-8} alkenyl, C_{2-8} alkynyl, $(CH_2)_r C_{3-6}$ cycloalkyl, Cl, Br, I, F, $(CF_2)_r CF_3$, NO_2 , CN, $(CH_2)_r NR^{11f} R^{11f}$, $(CH_2)_r OH$, $(CH_2)_r OC_{1-4}$ alkyl, $(CH_2)_r SC_{1-4}$ alkyl, $(CH_2)_r C(O) OH$,
 5 $(CH_2)_r C(O) R^{11b}$, $(CH_2)_r C(O) NR^{11f} R^{11f}$, $(CH_2)_r NR^{11f} C(O) R^{11a}$, $(CH_2)_r C(O) OC_{1-4}$ alkyl, $(CH_2)_r OC(O) R^{11b}$, $(CH_2)_r C(=NR^{11f}) NR^{11f} R^{11f}$, $(CH_2)_r NHC(=NR^{11f}) NR^{11f} R^{11f}$, $(CH_2)_r S(O)_p R^{11b}$, $(CH_2)_r S(O)_2 NR^{11f} R^{11f}$, $(CH_2)_r NR^{11f} S(O)_2 R^{11b}$, and $(CH_2)_r$ phenyl substituted with 0-3 R^{11e} ;

10 R^{11d} , at each occurrence, is selected from methyl, CF_3 , C_{2-6} alkyl substituted with 0-3 R^{11e} , C_{3-6} alkenyl, C_{3-6} alkynyl, and a C_{3-10} carbocyclic residue substituted with 0-3 R^{11c} ;

15 R^{11e} , at each occurrence, is selected from C_{1-6} alkyl, C_{2-8} alkenyl, C_{2-8} alkynyl, C_{3-6} cycloalkyl, Cl, F, Br, I, CN, NO_2 , $(CF_2)_r CF_3$, $(CH_2)_r OC_{1-5}$ alkyl, OH, SH, $(CH_2)_r SC_{1-5}$ alkyl, $(CH_2)_r NR^{11f} R^{11f}$, and $(CH_2)_r$ phenyl;

20 R^{11f} , at each occurrence, is selected from H, C_{1-6} alkyl, and C_{3-6} cycloalkyl;

25 R^{15} , at each occurrence, is selected from C_{1-8} alkyl, $(CH_2)_r C_{3-6}$ cycloalkyl, Cl, Br, I, F, NO_2 , CN, $(CHR')_r NR^{15a} R^{15a'}$, $(CHR')_r OH$, $(CHR')_r O(CHR')_r R^{15d}$, $(CHR')_r SH$, $(CHR')_r C(O) H$, $(CHR')_r S(CHR')_r R^{15d}$, $(CHR')_r C(O) OH$, $(CHR')_r C(O) (CHR')_r R^{15b}$,
 30 $(CHR')_r C(O) NR^{15a} R^{15a'}$, $(CHR')_r NR^{15f} C(O) (CHR')_r R^{15b}$, $(CHR')_r NR^{15f} C(O) NR^{15a} R^{15a'}$, $(CHR')_r C(O) O(CHR')_r R^{15d}$, $(CHR')_r OC(O) (CHR')_r R^{15b}$, $(CHR')_r C(=NR^{15f}) NR^{15a} R^{15a'}$, $(CHR')_r NHC(=NR^{15f}) NR^{15a} R^{15a'}$, $(CHR')_r S(O)_p (CHR')_r R^{15b}$,

(CHR')_rS(O)₂NR^{15a}R^{15a'}, (CHR')_rNR^{15f}S(O)₂(CHR')_rR^{15b}, C₁₋₆ haloalkyl, C₂₋₈ alkenyl substituted with 0-3 R', C₂₋₈ alkynyl substituted with 0-3 R', (CHR')_rphenyl substituted with 0-3 R^{15e}, and a (CH₂)_{r-5-10} membered heterocyclic system containing 1-4 heteroatoms selected from N, O, and S, substituted with 0-2 R^{15e};

R', at each occurrence, is selected from H, C₁₋₆ alkyl, C₂₋₈ alkenyl, C₂₋₈ alkynyl, (CH₂)_rC₃₋₆ cycloalkyl, and (CH₂)_rphenyl substituted with R^{15e};

R^{15a} and R^{15a'}, at each occurrence, are selected from H, C₁₋₆ alkyl, C₃₋₈ alkenyl, C₃₋₈ alkynyl, a (CH₂)_r-C₃₋₁₀ carbocyclic residue substituted with 0-5 R^{15e}, and a (CH₂)_{r-5-10} membered heterocyclic system containing 1-4 heteroatoms selected from N, O, and S, substituted with 0-2 R^{15e};

R^{15b}, at each occurrence, is selected from C₁₋₆ alkyl, C₂₋₈ alkenyl, C₂₋₈ alkynyl, a (CH₂)_r-C₃₋₆ carbocyclic residue substituted with 0-3 R^{15e}, and (CH₂)_{r-5-6} membered heterocyclic system containing 1-4 heteroatoms selected from N, O, and S, substituted with 0-2 R^{15e};

R^{15d}, at each occurrence, is selected from C₃₋₈ alkenyl, C₃₋₈ alkynyl, methyl, CF₃, C₂₋₆ alkyl substituted with 0-3 R^{15e}, a (CH₂)_r-C₃₋₁₀ carbocyclic residue substituted with 0-3 R^{15e}, and a (CH₂)_{r-5-6} membered heterocyclic system containing 1-4 heteroatoms selected from N, O, and S, substituted with 0-3 R^{15e};

R^{15e}, at each occurrence, is selected from C₁₋₆ alkyl, C₂₋₈ alkenyl, C₂₋₈ alkynyl, (CH₂)_rC₃₋₆ cycloalkyl, Cl, F, Br,

I, CN, NO₂, (CF₂)_rCF₃, (CH₂)_rOC₁₋₅ alkyl, OH, SH,
(CH₂)_rSC₁₋₅ alkyl, (CH₂)_rNR^{15f}R^{15f}, and (CH₂)_rphenyl;

R^{15f}, at each occurrence, is selected from H, C₁₋₆ alkyl, C₃₋₆
5 \ cycloalkyl, and phenyl;

R¹⁶, at each occurrence, is selected from C₁₋₈ alkyl, C₂₋₈
alkenyl, C₂₋₈ alkynyl, (CH₂)_rC₃₋₆ cycloalkyl, Cl, Br, I,
F, NO₂, CN, (CHR')_rNR^{16a}R^{16a'}, (CHR')_rOH,
10 (CHR')_rO(CHR')_rR^{16d}, (CHR')_rSH, (CHR')_rC(O)H,
(CHR')_rS(CHR')_rR^{16d}, (CHR')_rC(O)OH,
(CHR')_rC(O)(CHR')_rR^{16b}, (CHR')_rC(O)NR^{16a}R^{16a'},
(CHR')_rNR^{16f}C(O)(CHR')_rR^{16b}, (CHR')_rC(O)O(CHR')_rR^{16d},
(CHR')_rOC(O)(CHR')_rR^{16b}, (CHR')_rC(=NR^{16f})NR^{16a}R^{16a'},
15 (CHR')_rNHC(=NR^{16f})NR^{16a}R^{16a'}, (CHR')_rS(O)_p(CHR')_rR^{16b},
(CHR')_rS(O)₂NR^{16a}R^{16a'}, (CHR')_rNR^{16f}S(O)₂(CHR')_rR^{16b}, C₁₋₆
haloalkyl, C₂₋₈ alkenyl substituted with 0-3 R', C₂₋₈
alkynyl substituted with 0-3 R', and (CHR')_rphenyl
substituted with 0-3 R^{16e};

20 R^{16a} and R^{16a'}, at each occurrence, are selected from H, C₁₋₆
alkyl, C₃₋₈ alkenyl, C₃₋₈ alkynyl, a (CH₂)_r-C₃₋₁₀
carbocyclic residue substituted with 0-5 R^{16e}, and a
(CH₂)_r-5-10 membered heterocyclic system containing 1-4
25 heteroatoms selected from N, O, and S, substituted with
0-2 R^{16e};

R^{16b}, at each occurrence, is selected from C₁₋₆ alkyl, C₂₋₈
alkenyl, C₂₋₈ alkynyl, a (CH₂)_rC₃₋₆ carbocyclic residue
30 substituted with 0-3 R^{16e}, and a (CH₂)_r-5-6 membered
heterocyclic system containing 1-4 heteroatoms selected
from N, O, and S, substituted with 0-2 R^{16e};

R^{16d}, at each occurrence, is selected from C₃₋₈ alkenyl, C₃₋₈ alkynyl, methyl, CF₃, C₂₋₆ alkyl substituted with 0-3 R^{16e}, a (CH₂)_r-C₃₋₁₀ carbocyclic residue substituted with 0-3 R^{16e}, and a (CH₂)_r-5-6 membered heterocyclic system containing 1-4 heteroatoms selected from N, O, and S, substituted with 0-3 R^{16e};

R^{16e}, at each occurrence, is selected from C₁₋₆ alkyl, C₂₋₈ alkenyl, C₂₋₈ alkynyl, (CH₂)_rC₃₋₆ cycloalkyl, Cl, F, Br, I, CN, NO₂, (CF₂)_rCF₃, (CH₂)_rOC₁₋₅ alkyl, OH, SH, (CH₂)_rSC₁₋₅ alkyl, (CH₂)_rNR^{16f}R^{16f}, and (CH₂)_rphenyl;

R^{16f}, at each occurrence, is selected from H, C₁₋₅ alkyl, and C₃₋₆ cycloalkyl, and phenyl;

R¹⁷, is selected from H, C₁₋₆ alkyl, C₂₋₈ alkenyl, C₂₋₈ alkynyl, (CH₂)_qOH, (CH₂)_qSH, (CH₂)_qOR^{17d}, (CH₂)_qSR^{17d}, (CH₂)_qNR^{17a}R^{17a'}, (CH₂)_rC(O)OH, (CH₂)_rC(O)R^{17b}, (CH₂)_rC(O)NR^{17a}R^{17a'}, (CH₂)_qNR^{17a}C(O)R^{17b}, (CH₂)_qNR^{17a}C(O)H, (CH₂)_rC(O)OR^{17a}, (CH₂)_qOC(O)R^{17b}, (CH₂)_qS(O)_pR^{17b}, (CH₂)_qS(O)₂NR^{17a}R^{17a'}, (CH₂)_qNR^{17a}S(O)₂R^{17b}, C₁₋₆ haloalkyl, a (CH₂)_r-C₃₋₁₀ carbocyclic residue substituted with 0-3 R^{17c}, and a (CH₂)_r-5-10 membered heterocyclic system containing 1-4 heteroatoms selected from N, O, and S, substituted with 0-2 R^{17c};

R^{17a} and R^{17a'}, at each occurrence, are selected from H, C₁₋₆ alkyl, C₃₋₈ alkenyl, C₃₋₈ alkynyl, a (CH₂)_r-C₃₋₁₀ carbocyclic residue substituted with 0-5 R^{17e}, and a (CH₂)_r-5-10 membered heterocyclic system containing 1-4 heteroatoms selected from N, O, and S, substituted with 0-3 R^{17e};

R^{17b}, at each occurrence, is selected from C₁₋₆ alkyl, C₂₋₈ alkenyl, C₂₋₈ alkynyl, a (CH₂)_r-C₃₋₆ carbocyclic residue substituted with 0-2 R^{17e}, and a (CH₂)_r-5-6 membered heterocyclic system containing 1-4 heteroatoms selected from N, O, and S, substituted with 0-3 R^{17e};

R^{17c}, at each occurrence, is selected from C₁₋₆ alkyl, C₂₋₈ alkenyl, C₂₋₈ alkynyl, (CH₂)_r-C₃₋₆ cycloalkyl, Cl, Br, I, F, (CF₂)_rCF₃, NO₂, CN, (CH₂)_rNR^{17f}R^{17f}, (CH₂)_rOH, (CH₂)_rOC₁₋₄ alkyl, (CH₂)_rSC₁₋₄ alkyl, (CH₂)_rC(O)OH, (CH₂)_rC(O)R^{17b}, (CH₂)_rC(O)NR^{17f}R^{17f}, (CH₂)_rNR^{17f}C(O)R^{17a}, (CH₂)_rC(O)OC₁₋₄ alkyl, (CH₂)_rOC(O)R^{17b}, (CH₂)_rC(=NR^{17f})NR^{17f}R^{17f}, (CH₂)_rS(O)_pR^{17b}, (CH₂)_rNHC(=NR^{17f})NR^{17f}R^{17f}, (CH₂)_rS(O)₂NR^{17f}R^{17f}, (CH₂)_rNR^{17f}S(O)₂R^{17b}, and (CH₂)_rphenyl substituted with 0-3 R^{17e};

R^{17d}, at each occurrence, is selected from methyl, CF₃, C₂₋₆ alkyl substituted with 0-3 R^{17e}, C₃₋₆ alkenyl, C₃₋₆ alkynyl, and a C₃₋₁₀ carbocyclic residue substituted with 0-3 R^{17c};

R^{17e}, at each occurrence, is selected from C₁₋₆ alkyl, C₂₋₈ alkenyl, C₂₋₈ alkynyl, C₃₋₆ cycloalkyl, Cl, F, Br, I, CN, NO₂, (CF₂)_rCF₃, (CH₂)_rOC₁₋₅ alkyl, OH, SH, (CH₂)_rSC₁₋₅ alkyl, (CH₂)_rNR^{17f}R^{17f}, and (CH₂)_rphenyl;

R^{17f}, at each occurrence, is selected from H, C₁₋₆ alkyl, and C₃₋₆ cycloalkyl;

R¹⁸, is selected from H, C₁₋₆ alkyl, C₂₋₈ alkenyl, C₂₋₈ alkynyl, (CHR')_qOH, (CHR')_qSH, (CHR')_qOR^{18d}, (CHR')_qSR^{18d}, (CHR')_qNR^{18a}R^{18a'}, (CHR')_rC(O)OH, (CHR')_rC(O)R^{18b}, (CHR')_rC(O)NR^{18a}R^{18a'},

$(\text{CHR}')_q \text{NR}^{18a} \text{C}(\text{O}) \text{R}^{18a}$, $(\text{CHR}')_q \text{NR}^{18a} \text{C}(\text{O}) \text{H}$, $(\text{CHR}')_r \text{C}(\text{O}) \text{OR}^{18a}$,
 $(\text{CHR}')_q \text{OC}(\text{O}) \text{R}^{18b}$, $(\text{CHR}')_q \text{S}(\text{O})_p \text{R}^{18b}$, $(\text{CHR}')_q \text{S}(\text{O})_2 \text{NR}^{18a} \text{R}^{18a'}$,
 $(\text{CHR}')_q \text{NR}^{18a} \text{S}(\text{O})_2 \text{R}^{18b}$, C_{1-6} haloalkyl, a $(\text{CHR}')_r \text{-C}_{3-10}$
 carbocyclic residue substituted with 0-3 R^{18c} , and a
 5 $(\text{CHR}')_r \text{-5-10}$ membered heterocyclic system containing 1-4
 heteroatoms selected from N, O, and S, substituted with
 0-2 R^{18c} ;

R^{18a} and $\text{R}^{18a'}$, at each occurrence, are selected from H, C_{1-6}
 10 alkyl, C_{3-8} alkenyl, C_{3-8} alkynyl, a $(\text{CH}_2)_r \text{-C}_{3-10}$
 carbocyclic residue substituted with 0-5 R^{18e} , and a
 $(\text{CH}_2)_r \text{-5-10}$ membered heterocyclic system containing 1-4
 heteroatoms selected from N, O, and S, substituted with
 0-3 R^{18e} ;

15 R^{18b} , at each occurrence, is selected from C_{1-6} alkyl, C_{2-8}
 alkenyl, C_{2-8} alkynyl, a $(\text{CH}_2)_r \text{-C}_{3-6}$ carbocyclic residue
 substituted with 0-2 R^{18e} , and a $(\text{CH}_2)_r \text{-5-6}$ membered
 heterocyclic system containing 1-4 heteroatoms selected
 20 from N, O, and S, substituted with 0-3 R^{18e} ;

R^{18c} , at each occurrence, is selected from C_{1-6} alkyl, C_{2-8}
 alkenyl, C_{2-8} alkynyl, $(\text{CH}_2)_r \text{C}_{3-6}$ cycloalkyl, Cl, Br, I,
 F, $(\text{CF}_2)_r \text{CF}_3$, NO_2 , CN, $(\text{CH}_2)_r \text{NR}^{18f} \text{R}^{18f}$, $(\text{CH}_2)_r \text{OH}$,
 25 $(\text{CH}_2)_r \text{OC}_{1-4}$ alkyl, $(\text{CH}_2)_r \text{SC}_{1-4}$ alkyl, $(\text{CH}_2)_r \text{C}(\text{O}) \text{OH}$,
 $(\text{CH}_2)_r \text{C}(\text{O}) \text{R}^{18b}$, $(\text{CH}_2)_r \text{C}(\text{O}) \text{NR}^{18f} \text{R}^{18f}$, $(\text{CH}_2)_r \text{NR}^{18f} \text{C}(\text{O}) \text{R}^{18a}$,
 $(\text{CH}_2)_r \text{C}(\text{O}) \text{OC}_{1-4}$ alkyl, $(\text{CH}_2)_r \text{OC}(\text{O}) \text{R}^{18b}$,
 $(\text{CH}_2)_r \text{C}(=\text{NR}^{18f}) \text{NR}^{18f} \text{R}^{18f}$, $(\text{CH}_2)_r \text{S}(\text{O})_p \text{R}^{18b}$,
 $(\text{CH}_2)_r \text{NHC}(=\text{NR}^{18f}) \text{NR}^{18f} \text{R}^{18f}$, $(\text{CH}_2)_r \text{S}(\text{O})_2 \text{NR}^{18f} \text{R}^{18f}$,
 30 $(\text{CH}_2)_r \text{NR}^{18f} \text{S}(\text{O})_2 \text{R}^{18b}$, and $(\text{CH}_2)_r$ phenyl substituted with 0-
 3 R^{18e} ;

R^{18d} , at each occurrence, is selected from methyl, CF_3 , C_{2-6}
 alkyl substituted with 0-3 R^{18e} , C_{3-6} alkenyl, C_{3-6}

alkynyl, and a C₃₋₁₀ carbocyclic residue substituted with 0-3 R^{18c};

5 R^{18e}, at each occurrence, is selected from C₁₋₆ alkyl, C₂₋₈ alkenyl, C₂₋₈ alkynyl, C₃₋₆ cycloalkyl, Cl, F, Br, I, CN, NO₂, (CF₂)_rCF₃, (CH₂)_rOC₁₋₅ alkyl, OH, SH, (CH₂)_rSC₁₋₅ alkyl, (CH₂)_rNR^{18f}R^{18f}, and (CH₂)_rphenyl;

10 R^{18f}, at each occurrence, is selected from H, C₁₋₆ alkyl, and C₃₋₆ cycloalkyl;

15 R¹⁹ is selected from C₁₋₈ alkyl, C₃₋₈ alkenyl, C₃₋₈ alkynyl, -C(O)R^{19b}, -C(O)NR^{19a}R^{19a}, -C(O)OR^{19a}, and -SO₂R^{19a}, a (CHR')_r-C₃₋₁₀ carbocyclic residue substituted with 0-3 R¹⁶, and a (CHR')_r-5-10 membered heterocyclic system containing 1-4 heteroatoms selected from N, O, and S, substituted with 0-2 R¹⁶;

20 R^{19a} is selected from C₁₋₈ alkyl, C₃₋₈ alkenyl, C₃₋₈ alkynyl, C₃₋₆ cycloalkyl, a (CR^{5'}R^{5''})_t-C₃₋₁₀ carbocyclic residue substituted with 0-5 R¹⁵¹⁶ and a (CR^{5'}R^{5''})_r-5-10 membered heterocyclic system containing 1-4 heteroatoms selected from N, O, and S, substituted with 0-3 R¹⁶¹⁶;

25 R^{19b} is selected from H, C₁₋₈ alkyl, C₃₋₈ alkenyl, C₃₋₈ alkynyl, C₃₋₆ cycloalkyl, a (CR^{5'}R^{5''})_t-C₃₋₁₀ carbocyclic residue substituted with 0-5 R¹⁵¹⁶ and a (CR^{5'}R^{5''})_r-5-10 membered heterocyclic system containing 30 1-4 heteroatoms selected from N, O, and S, substituted with 0-3 R¹⁶¹⁶;

m, at each occurrence, is selected from 1, 2, 3, 4, and 5;

n, at each occurrence, is selected from 0, 1, 2, 3, 4, and 5;
 o, at each occurrence, is selected from 1 and 2;
 5 p, at each occurrence, is selected from 1 and 2;
 r, at each occurrence, is selected from 0, 1, 2, 3, 4, and 5;
 q, at each occurrence, is selected from 1, 2, 3, 4, and 5;
 10 s, at each occurrence, is selected from 0, 1, and 2;
 t, at each occurrence, is selected from 0, 1, 2, 3, 4, and 5;
 15 u, at each occurrence, is independently selected from 0, 1,
 and 2;
 v, at each occurrence, is selected from 0 and 1; and
 20 w, at each occurrence, is selected from 0, 1, 2, and 3.

2. The compound of claim 1, wherein:

25 R^4 is absent or, taken with the nitrogen to which it is
 attached to form an N-oxide;
 R^7 , is selected from H, C_{1-6} alkyl, C_{2-8} alkenyl, C_{2-8}
 alkynyl, $(CHR')_qOH$, $(CHR')_qOR^{7d}$, $(CHR')_qNR^{7a}R^{7a'}$,
 $(CHR')_qC(O)R^{7b}$, $(CHR')_qC(O)NR^{7a}R^{7a'}$, $(CHR')_qNR^{7a}C(O)R^{7b}$,
 30 $(CHR')_qNR^{7a}C(O)H$, $(CHR')_qS(O)_2NR^{7a}R^{7a'}$,
 $(CHR')_qNR^{7a}S(O)_2R^{7b}$, $(CHR')_qNHC(O)NHR^{7a}$,
 $(CHR')_qNHC(O)OR^{7a}$, $(CHR')_qOC(O)NHR^{7a}$, C_{1-6} haloalkyl, a
 $(CHR')_r-C_{3-10}$ carbocyclic residue substituted with 0-3
 R^{7c} , and a $(CHR')_r-5-10$ membered heterocyclic system
 35 containing 1-4 heteroatoms selected from N, O, and S,
 substituted with 0-2 R^{7c} ;

alternatively, R⁷ and R⁸ join to form C₃₋₇ cycloalkyl, or
=NR^{8b};

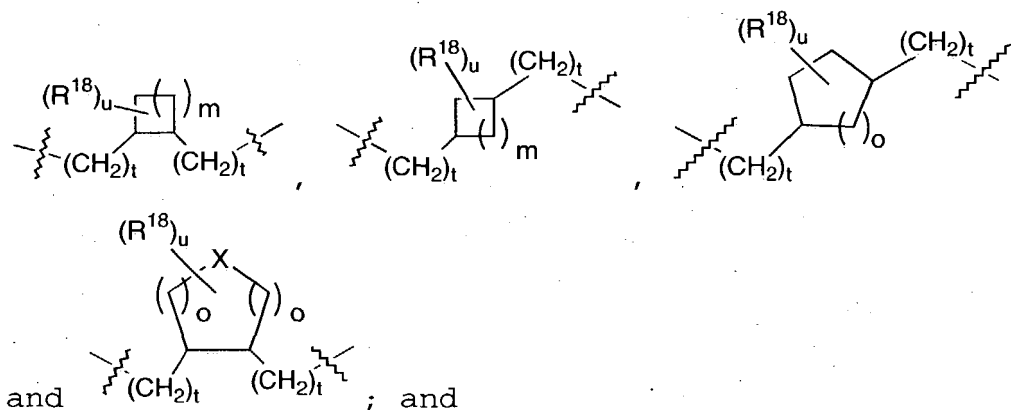
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R¹¹, is selected from H, C₁₋₆ alkyl, C₂₋₈ alkenyl, C₂₋₈
alkynyl, (CH₂)_qOH, (CH₂)_qOR^{11d}, (CH₂)_qNR^{11a}R^{11a'},
(CH₂)_rC(O)R^{11b}, (CH₂)_rC(O)NR^{11a}R^{11a'}, (CH₂)_qNR^{11a}C(O)R^{11b},
(CH₂)_qNR^{11a}C(O)NHR^{11a}, (CH₂)_qNHC(O)NHR^{11a},
10 (CH₂)_qNHC(O)OR^{11a}, (CH₂)_qOC(O)NHR^{11a}, C₁₋₆ haloalkyl, a
(CH₂)_r-C₃₋₁₀ carbocyclic residue substituted with 0-5
R^{11c}, and a (CH₂)_r-5-10 membered heterocyclic system
containing 1-4 heteroatoms selected from N, O, and S,
substituted with 0-3 R^{11c}.

15

3. The compound of claim 2, wherein:

A is selected from



t is selected from 0, 1, and 2.

4. The compound of claim 3, wherein:

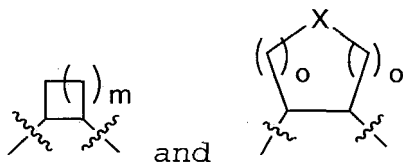
25

R¹⁷ is selected from H; and

R¹⁸ is selected from H.

5. The compound of claim 4, wherein:

A is selected from



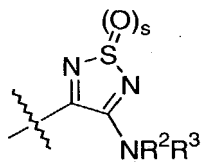
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6. The compound of claim 5, wherein:

G is selected from $-C(O)R^3$, $-C(O)NR^2R^3$, $-C(O)OR^3$, $-SO_2NR^2R^3$,
and $-SO_2R^3$, $-C(=S)NR^2R^3$, $C(=NR^{1a})NR^2R^3$, $C(=CHCN)NR^2R^3$,

10

$C(=CHNO_2)NR^2R^3$, $C(=C(CN)_2)NR^2R^3$, and



7. The compound of claim 6, wherein:

15

G is selected from $-C(O)NR^2R^3$, $^{23}C(=NR^{1a})NR^2R^3$, $C(=CHCN)NR^2R^3$,
 $C(=CHNO_2)NR^2R^3$, and $C(=C(CN)_2)NR^2R^3$;

8. The compound of claim 7, wherein:

20

R^{16} , at each occurrence, is selected from methyl, ethyl,
propyl, iso-propyl, C_{2-8} alkenyl, C_{2-8} alkynyl, $(CH_2)_rC_3-$
 $_6$ cycloalkyl, Cl, Br, I, F, NO_2 , CN, $(CHR')_rNR^{16a}R^{16a'}$,
 $(CHR')_rOH$, $(CHR')_rO(CHR')_rR^{16d}$, $(CHR')_rC(O)(CHR')_rR^{16b}$,
25 $(CHR')_rC(O)NR^{16a}R^{16a'}$, $(CHR')_rNR^{16f}C(O)(CHR')_rR^{16b}$,
 $(CHR')_rS(O)_p(CHR')_rR^{16b}$, $(CHR')_rS(O)_2NR^{16a}R^{16a'}$,
 $(CHR')_rNR^{16f}S(O)_2(CHR')_rR^{16b}$, C_{1-6} haloalkyl, and
 $(CHR')_r$ phenyl substituted with 0-3 R^{16e} ;

R^{16a} and R^{16a'}, at each occurrence, are selected from H, methyl, ethyl, and a (CH₂)_r-C₃₋₆ carbocyclic residue substituted with 0-2 R^{16e};

5 R^{16e}, at each occurrence, is selected from methyl, ethyl, Cl, F, Br, I, CN, CF₃, and OCH₃;

R^{16f}, at each occurrence, is selected from H; and

10 r is selected from 0, 1, and 2.

9. The compound of claim 8, wherein:

R³ is selected from a (CR^{3'}R^{3''})_r-C₃₋₆ carbocyclic residue
15 substituted with 0-2 R¹⁵ and a (CR^{3'}CR^{3''})_r-5-10 membered heterocyclic system containing 1-4 heteroatoms selected from N, O, and S, substituted with 0-2 R¹⁵;

R^{3'} and R^{3''}, at each occurrence, are selected from H;

20

R¹⁵, at each occurrence, is selected from C₁₋₈ alkyl, (CH₂)_rC₃₋₆ cycloalkyl, Cl, Br, F, CN, (CHR')_rNR^{15a}R^{15a'}, (CHR')_rOH, (CHR')_rO(CHR')_rR^{15d}, (CHR')_rC(O)(CHR')_rR^{15b}, (CHR')_rC(O)NR^{15a}R^{15a'}, (CHR')_rNR^{15f}C(O)(CHR')_rR^{15b},
25 (CHR')_rNR^{15f}C(O)NR^{15f}R^{15f}, (CHR')_rC(O)O(CHR')_rR^{15d}, (CHR')_rOC(O)(CHR')_rR^{15b}, (CHR')_rS(O)_p(CHR')_rR^{15b}, (CHR')_rS(O)₂NR^{15a}R^{15a'}, (CHR')_rNR^{15f}S(O)₂(CHR')_rR^{15b}, C₁₋₆ haloalkyl, C₂₋₈ alkenyl substituted with 0-3 R', C₂₋₈ alkynyl substituted with 0-3 R', (CHR')_rphenyl
30 substituted with 0-3 R^{15e}, and a (CH₂)_r-5-10 membered heterocyclic system containing 1-4 heteroatoms selected from N, O, and S, substituted with 0-2 R^{15e};

R', at each occurrence, is selected from H, and C₁₋₆ alkyl;

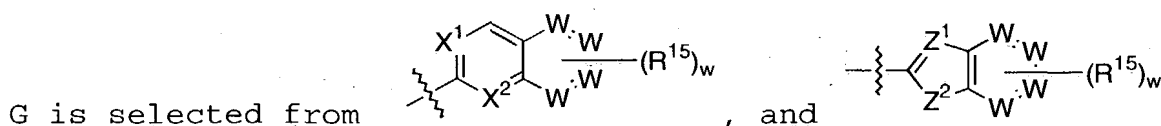
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R^{15a} and R^{15a'}, at each occurrence, are selected from H, C₁₋₆ alkyl, a (CH₂)_r-C₃₋₆ carbocyclic residue substituted with 0-5 R^{15e}, and a (CH₂)_r-5-6 membered heterocyclic system containing 1-2 heteroatoms selected from N, O, and S, substituted with 0-2 R^{15e};

R^{15b}, at each occurrence, is selected from C₁₋₆ alkyl, a (CH₂)_r-C₃₋₆ carbocyclic residue substituted with 0-3 R^{15e}, and (CH₂)_r-5-6 membered heterocyclic system containing 1-2 heteroatoms selected from N, O, and S, substituted with 0-2 R^{15e}; and

R^{15e}, at each occurrence, is selected from C₁₋₆ alkyl, Cl, F, Br, I, CN, (CF₂)_rCF₃, and OH.

10. The compound of claim 5, wherein:



11. The compound of claim 10, wherein:

R¹ is selected from H;

both X¹ and X² cannot be C; and

Z² is selected from NR^{1'}, O, and S.

12. The compound of claim 11, wherein:

R¹⁶, at each occurrence, is selected from methyl, ethyl, propyl, iso-propyl, C₂₋₈ alkenyl, C₂₋₈ alkynyl, (CH₂)_rC₃₋₆ cycloalkyl, Cl, Br, I, F, NO₂, CN, (CHR')_rNR^{16a}R^{16a'}, (CHR')_rOH, (CHR')_rO(CHR')_rR^{16d}, (CHR')_rC(O)(CHR')_rR^{16b},

$(\text{CHR}')_r\text{C}(\text{O})\text{NR}^{16a}\text{R}^{16a'}$, $(\text{CHR}')_r\text{NR}^{16f}\text{C}(\text{O})(\text{CHR}')_r\text{R}^{16b}$,
 $(\text{CHR}')_r\text{S}(\text{O})_p(\text{CHR}')_r\text{R}^{16b}$, $(\text{CHR}')_r\text{S}(\text{O})_2\text{NR}^{16a}\text{R}^{16a'}$,
 $(\text{CHR}')_r\text{NR}^{16f}\text{S}(\text{O})_2(\text{CHR}')_r\text{R}^{16b}$, C_{1-6} haloalkyl, and
 $(\text{CHR}')_r$ phenyl substituted with 0-3 R^{16e} ;

5

R^{16a} and $\text{R}^{16a'}$, at each occurrence, are selected from H,
 methyl, ethyl, and a $(\text{CH}_2)_r\text{-C}_{3-6}$ carbocyclic residue
 substituted with 0-2 R^{16e} ;

10 R^{16e} , at each occurrence, is selected from methyl, ethyl, Cl,
 F, Br, I, CN, CF_3 , and OCH_3 ;

R^{16f} , at each occurrence, is selected from H; and

15 r is selected from 0, 1, and 2.

13. The compound of claim 12, wherein:

R^{15} , at each occurrence, is selected from C_{1-8} alkyl,

20 $(\text{CH}_2)_r\text{C}_{3-6}$ cycloalkyl, Cl, Br, F, CN, $(\text{CHR}')_r\text{NR}^{15a}\text{R}^{15a'}$,
 $(\text{CHR}')_r\text{OH}$, $(\text{CHR}')_r\text{O}(\text{CHR}')_r\text{R}^{15d}$, $(\text{CHR}')_r\text{C}(\text{O})(\text{CHR}')_r\text{R}^{15b}$,
 $(\text{CHR}')_r\text{C}(\text{O})\text{NR}^{15a}\text{R}^{15a'}$, $(\text{CHR}')_r\text{NR}^{15f}\text{C}(\text{O})(\text{CHR}')_r\text{R}^{15b}$,
 $(\text{CHR}')_r\text{NR}^{15f}\text{C}(\text{O})\text{NR}^{15f}\text{R}^{15f}$, $(\text{CHR}')_r\text{C}(\text{O})\text{O}(\text{CHR}')_r\text{R}^{15d}$,
 $(\text{CHR}')_r\text{OC}(\text{O})(\text{CHR}')_r\text{R}^{15b}$, $(\text{CHR}')_r\text{S}(\text{O})_p(\text{CHR}')_r\text{R}^{15b}$,
 25 $(\text{CHR}')_r\text{S}(\text{O})_2\text{NR}^{15a}\text{R}^{15a'}$, $(\text{CHR}')_r\text{NR}^{15f}\text{S}(\text{O})_2(\text{CHR}')_r\text{R}^{15b}$, C_{1-6}
 haloalkyl, C_{2-8} alkenyl, C_{2-8} alkynyl, $(\text{CHR}')_r$ phenyl
 substituted with 0-3 R^{15e} , and a $(\text{CH}_2)_r\text{-5-10}$ membered
 heterocyclic system containing 1-4 heteroatoms selected
 from N, O, and S, substituted with 0-2 R^{15e} ;

30

R' , at each occurrence, is selected from H, and C_{1-6} alkyl;

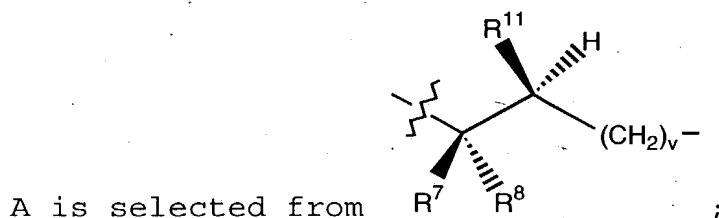
R^{15a} and $\text{R}^{15a'}$, at each occurrence, are selected from H, C_{1-6}
 alkyl, a $(\text{CH}_2)_r\text{-C}_{3-6}$ carbocyclic residue substituted

with 0-5 R^{15e} , and a $(CH_2)_r$ -5-6 membered heterocyclic system containing 1-2 heteroatoms selected from N, O, and S, substituted with 0-2 R^{15e} ;

5 R^{15b} , at each occurrence, is selected from C_{1-6} alkyl, a $(CH_2)_r$ - C_{3-6} carbocyclic residue substituted with 0-3 R^{15e} , and $(CH_2)_r$ -5-6 membered heterocyclic system containing 1-2 heteroatoms selected from N, O, and S, substituted with 0-2 R^{15e} ; and

10 R^{15e} , at each occurrence, is selected from C_{1-6} alkyl, Cl, F, Br, I, CN, $(CF_2)_rCF_3$, and OH.

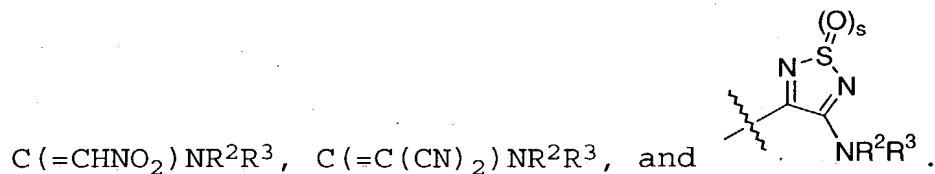
14. The compound of claim 2, wherein:



v is selected from 0 and 1.

20 15. The compound of claim 14, wherein:

G is selected from $-C(O)R^3$, $-C(O)NR^2R^3$, $-C(O)OR^3$, $-SO_2NR^2R^3$, and $-SO_2R^3$, $-C(=S)NR^2R^3$, $C(=NR^{1a})NR^2R^3$, $C(=CHCN)NR^2R^3$,



16. The compound of claim 15, wherein:

G is selected from $-C(O)NR^2R^3$, $C(=NR^{1a})NR^2R^3$, $C(=CHCN)NR^2R^3$, $C(=CHNO_2)NR^2R^3$, and $C(=C(CN)_2)NR^2R^3$.

17. The compound of claim 16, wherein:

5 R^{16} , at each occurrence, is selected from methyl, ethyl, propyl, iso-propyl, C_{2-8} alkenyl, C_{2-8} alkynyl, $(CH_2)_rC_{3-6}$ cycloalkyl, Cl, Br, I, F, NO_2 , CN, $(CHR')_rNR^{16a}R^{16a'}$, $(CHR')_rOH$, $(CHR')_rO(CHR')_rR^{16d}$, $(CHR')_rC(O)(CHR')_rR^{16b}$,
10 $(CHR')_rC(O)NR^{16a}R^{16a'}$, $(CHR')_rNR^{16f}C(O)(CHR')_rR^{16b}$, $(CHR')_rS(O)_p(CHR')_rR^{16b}$, $(CHR')_rS(O)_2NR^{16a}R^{16a'}$, $(CHR')_rNR^{16f}S(O)_2(CHR')_rR^{16b}$, C_{1-6} haloalkyl, and $(CHR')_r$ phenyl substituted with 0-3 R^{16e} ;

15 R^{16a} and $R^{16a'}$, at each occurrence, are selected from H, methyl, ethyl, and a $(CH_2)_r-C_{3-6}$ carbocyclic residue substituted with 0-2 R^{16e} ;

20 R^{16e} , at each occurrence, is selected from methyl, ethyl, Cl, F, Br, I, CN, CF_3 , and OCH_3 ;

R^{16f} , at each occurrence, is selected from H; and

25 r is selected from 0, 1, and 2.

18. The compound of claim 17, wherein:

30 R^3 is selected from a $(CR^{3'}R^{3''})_r-C_{3-6}$ carbocyclic residue substituted with 0-2 R^{15} and a $(CR^{3'}CR^{3''})_r-5-10$ membered heterocyclic system containing 1-4 heteroatoms selected from N, O, and S, substituted with 0-2 R^{15}

$R^{3'}$ and $R^{3''}$, at each occurrence, are selected from H;

R^{15} , at each occurrence, is selected from C_{1-8} alkyl,
 $(CH_2)_r C_{3-6}$ cycloalkyl, Cl, Br, F, CN, $(CHR')_r NR^{15a} R^{15a'}$,
 $(CHR')_r OH$, $(CHR')_r O(CHR')_r R^{15d}$, $(CHR')_r C(O)(CHR')_r R^{15b}$,
 $(CHR')_r C(O)NR^{15a} R^{15a'}$, $(CHR')_r NR^{15f} C(O)(CHR')_r R^{15b}$,
5 $(CHR')_r NR^{15f} C(O)NR^{15a} R^{15a'}$, $(CHR')_r C(O)O(CHR')_r R^{15d}$,
 $(CHR')_r OC(O)(CHR')_r R^{15b}$, $(CHR')_r S(O)_p(CHR')_r R^{15b}$,
 $(CHR')_r S(O)_2 NR^{15a} R^{15a'}$, $(CHR')_r NR^{15f} S(O)_2(CHR')_r R^{15b}$, C_{1-6}
haloalkyl, C_{2-8} alkenyl substituted with 0-3 R' , C_{2-8}
alkynyl substituted with 0-3 R' , $(CHR')_r$ phenyl
10 substituted with 0-3 R^{15e} , and a $(CH_2)_r$ -5-10 membered
heterocyclic system containing 1-4 heteroatoms selected
from N, O, and S, substituted with 0-2 R^{15e} ;

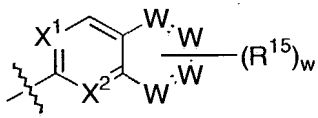
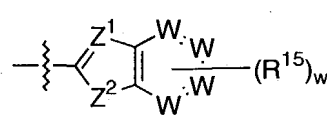
R' , at each occurrence, is selected from H, and C_{1-6} alkyl;

15 R^{15a} and $R^{15a'}$, at each occurrence, are selected from H, C_{1-6}
alkyl, a $(CH_2)_r$ - C_{3-6} carbocyclic residue substituted
with 0-5 R^{15e} , and a $(CH_2)_r$ -5-6 membered heterocyclic
system containing 1-2 heteroatoms selected from N, O,
20 and S, substituted with 0-2 R^{15e} ;

R^{15b} , at each occurrence, is selected from C_{1-6} alkyl, a
 $(CH_2)_r$ - C_{3-6} carbocyclic residue substituted with 0-3
 R^{15e} , and $(CH_2)_r$ -5-6 membered heterocyclic system
25 containing 1-2 heteroatoms selected from N, O, and S,
substituted with 0-2 R^{15e} ; and

R^{15e} , at each occurrence, is selected from C_{1-6} alkyl, Cl, F,
Br, I, CN, $(CF_2)_r CF_3$, and OH.

30 19. The compound of claim 14, wherein:

G is selected from , and .

20. The compound of claim 19, wherein:

5 R¹ is H;

both X¹ and X² cannot be C; and

Z² is selected from NR^{1'}, O, and S.

21. The compound of claim 20, wherein:

R¹⁶, at each occurrence, is selected from methyl, ethyl, propyl, iso-propyl, C₂₋₈ alkenyl, C₂₋₈ alkynyl, (CH₂)_rC₃₋₆ cycloalkyl, Cl, Br, I, F, NO₂, CN, (CHR')_rNR^{16a}R^{16a'},
 15 (CHR')_rOH, (CHR')_rO(CHR')_rR^{16d}, (CHR')_rC(O)(CHR')_rR^{16b},
 (CHR')_rC(O)NR^{16a}R^{16a'}, (CHR')_rNR^{16f}C(O)(CHR')_rR^{16b},
 (CHR')_rS(O)_p(CHR')_rR^{16b}, (CHR')_rS(O)₂NR^{16a}R^{16a'},
 (CHR')_rNR^{16f}S(O)₂(CHR')_rR^{16b}, C₁₋₆ haloalkyl, and
 20 (CHR')_rphenyl substituted with 0-3 R^{16e};

R^{16a} and R^{16a'}, at each occurrence, are selected from H, methyl, ethyl, and a (CH₂)_r-C₃₋₆ carbocyclic residue substituted with 0-2 R^{16e};

25 R^{16e}, at each occurrence, is selected from methyl, ethyl, Cl, F, Br, I, CN, CF₃, and OCH₃;

R^{16f}, at each occurrence, is selected from H; and

30 r is selected from 0, 1, and 2.

22. The compound of claim 21, wherein:

R^{15} , at each occurrence, is selected from C_{1-8} alkyl,
 $(CH_2)_r C_{3-6}$ cycloalkyl, Cl, Br, F, CN, $(CHR')_r NR^{15a} R^{15a'}$,
 $(CHR')_r OH$, $(CHR')_r O(CHR')_r R^{15d}$, $(CHR')_r C(O)(CHR')_r R^{15b}$,
 $(CHR')_r C(O)NR^{15a} R^{15a'}$, $(CHR')_r NR^{15f} C(O)(CHR')_r R^{15b}$,
5 $(CHR')_r NR^{15f} C(O)NR^{15a} R^{15a'}$, $(CHR')_r C(O)O(CHR')_r R^{15d}$,
 $(CHR')_r OC(O)(CHR')_r R^{15b}$, $(CHR')_r S(O)_p(CHR')_r R^{15b}$,
 $(CHR')_r S(O)_2 NR^{15a} R^{15a'}$, $(CHR')_r NR^{15f} S(O)_2(CHR')_r R^{15b}$, C_{1-6}
haloalkyl, C_{2-8} alkenyl substituted with 0-3 R' , C_{2-8}
alkynyl substituted with 0-3 R' , $(CHR')_r$ phenyl
10 substituted with 0-3 R^{15e} , and a $(CH_2)_{r-5-10}$ membered
heterocyclic system containing 1-4 heteroatoms selected
from N, O, and S, substituted with 0-2 R^{15e} ;

R' , at each occurrence, is selected from H, and C_{1-6} alkyl;

15 R^{15a} and $R^{15a'}$, at each occurrence, are selected from H, C_{1-6}
alkyl, a $(CH_2)_r$ - C_{3-6} carbocyclic residue substituted
with 0-5 R^{15e} , and a $(CH_2)_{r-5-6}$ membered heterocyclic
system containing 1-2 heteroatoms selected from N, O,
20 and S, substituted with 0-2 R^{15e} ;

R^{15b} , at each occurrence, is selected from C_{1-6} alkyl, a
 $(CH_2)_r$ - C_{3-6} carbocyclic residue substituted with 0-3
 R^{15e} , and $(CH_2)_{r-5-6}$ membered heterocyclic system
25 containing 1-2 heteroatoms selected from N, O, and S,
substituted with 0-2 R^{15e} ; and

R^{15e} , at each occurrence, is selected from C_{1-6} alkyl, Cl, F,
Br, I, CN, $(CF_2)_r CF_3$, and OH.

30 23. The compound of claim 1 wherein the compound is
selected from:

N-(3-acetylphenyl)-*N'*-[(2*R*)-2-[[*cis*-4-[(4-fluorophenyl)methyl]-1-cyclohexyl]amino]-(1*R*)-1-cyclohexyl]urea hydrochloride;

5 *N*-(3-acetylphenyl)-*N'*-[(2*R*)-2-[[*trans*-4-[(4-fluorophenyl)methyl]-1-cyclohexyl]amino]-(1*R*)-1-cyclohexyl]urea hydrochloride;

10 *N*-(3-cyanophenyl)-*N'*-[(2*R*)-2-[[*trans*-4-[(4-fluorophenyl)methyl]-1-cyclohexyl]amino]-(1*R*)-1-cyclohexyl]urea trifluoroacetate;

15 *N*-(3-cyanophenyl)-*N'*-[(2*R*)-2-[[*cis*-4-[(4-fluorophenyl)methyl]-1-cyclohexyl]amino]-(1*R*)-1-cyclohexyl]urea trifluoroacetate;

20 *N*-(3-cyanophenyl)-*N'*-[(2*S*)-2-[[*trans*-4-[(4-fluorophenyl)methyl]-1-cyclohexyl]amino]-(1*S*)-1-cyclohexyl]urea trifluoroacetate;

N-(3-cyanophenyl)-*N'*-[(2*S*)-2-[[*cis*-4-[(4-fluorophenyl)methyl]-1-cyclohexyl]amino]-(1*S*)-1-cyclohexyl]urea trifluoroacetate;

25 *N*-(3-acetylphenyl)-*N'*-[(2*S*)-2-[[*trans*-4-[(4-fluorophenyl)methyl]-1-cyclohexyl]amino]-(1*S*)-1-cyclohexyl]urea trifluoroacetate;

30 *N*-(3-acetylphenyl)-*N'*-[(2*S*)-2-[[*cis*-4-[(4-fluorophenyl)methyl]-1-cyclohexyl]amino]-(1*S*)-1-cyclohexyl]urea trifluoroacetate;

35 *N*-(3-acetylphenyl)-*N'*-[(2*R*)-2-[[3*R*]-3-[(4-fluorophenyl)methyl]-(1*R*)-1-cyclohexyl]amino]-(1*R*)-1-cyclohexyl]urea;

- N*-(3-acetylphenyl)-*N'*-[(2*R*)-2-[[(3*R*)-3-[(4-fluorophenyl)methyl]-(1*S*)-1-cyclohexyl]amino]-(1*R*)-1-cyclohexyl]urea;
- 5 *N*-(3-acetylphenyl)-*N'*-[(2*R*)-2-[[(3*S*)-3-[(4-fluorophenyl)methyl]-(1*R*)-1-cyclohexyl]amino]-(1*R*)-1-cyclohexyl]urea;
- 10 *N*-(3-acetylphenyl)-*N'*-[(2*R*)-2-[[(3*S*)-3-[(4-fluorophenyl)methyl]-(1*S*)-1-cyclohexyl]amino]-(1*R*)-1-cyclohexyl]urea;
- 15 *N*-(4-fluorophenyl)-*N'*-[(2*R*)-2-[[(3*R*)-3-[(4-fluorophenyl)methyl]-(1*R*)-1-cyclohexyl]amino]-(1*R*)-1-cyclohexyl]urea;
- 20 *N*-(4-fluorophenyl)-*N'*-[(2*R*)-2-[[(3*R*)-3-[(4-fluorophenyl)methyl]-(1*S*)-1-cyclohexyl]amino]-(1*R*)-1-cyclohexyl]urea;
- 25 *N*-(4-fluorophenyl)-*N'*-[(2*R*)-2-[[(3*S*)-3-[(4-fluorophenyl)methyl]-(1*S*)-1-cyclohexyl]amino]-(1*R*)-1-cyclohexyl]urea;
- 30 *N*-(3-acetylphenyl)-*N'*-((3*S*,4*S*)-4-{[4-(4-fluorobenzyl)cyclohexyl]amino}tetrahydro-3-furanyl)urea;
- N*-(3-acetylphenyl)-*N'*-({(2*S*)-1-[4-(4-fluorobenzyl)cyclohexyl]pyrrolidinyl)methyl)urea;
- 35 *N*-(3-acetylphenyl)-*N'*-({(2*S*)-1-[4-(4-fluorobenzyl)cyclohexyl]pyrrolidinyl)methyl)urea;

N-(3-acetylphenyl)-*N'*-({(2*R*)-1-[4-(4-fluorobenzyl)cyclohexyl]pyrrolidinyl)methyl)urea;

5 *N*-(3-acetylphenyl)-*N'*-({(2*R*)-1-[4-(4-fluorobenzyl)cyclohexyl]pyrrolidinyl)methyl)urea;

N-(3-acetylphenyl)-*N'*-{(3*R*)-1-[4-(4-fluorobenzyl)cyclohexyl]pyrrolidinyl}urea;

10 *N*-(3-acetylphenyl)-*N'*-{(3*R*)-1-[4-(4-fluorobenzyl)cyclohexyl]pyrrolidinyl}urea;

N-(3-acetylphenyl)-*N'*-{(3*S*)-1-[4-(4-fluorobenzyl)cyclohexyl]pyrrolidinyl}urea; and

15

N-(3-acetylphenyl)-*N'*-{(3*S*)-1-[4-(4-fluorobenzyl)cyclohexyl]pyrrolidinyl}urea.

24. A pharmaceutical composition, comprising a
20 pharmaceutically acceptable carrier and a therapeutically effective amount of a compound of claim 1.

25. A method for modulation of chemokine receptor activity comprising administering to a patient in need
25 thereof a therapeutically effective amount of a compound of claim 1.

26. A method for treating or preventing inflammatory diseases, comprising administering to a patient in need
30 thereof a therapeutically effective amount of a compound of claim 1.

27. A method for treating or preventing asthma, comprising administering to a patient in need thereof a
35 therapeutically effective amount of a compound of claim 1.